

16. A method for detecting a degree of hybridization between a probe and a sample comprising a biopolymer, the method comprising

(a) providing a substrate on which each of a plurality of types of probes is separately immobilized on each different and separate predetermined position, wherein the probes are labeled with a first detectable label;

(b) providing a sample comprising a biopolymer, wherein the biopolymer is labeled with a second detectable label;

(c) contacting the sample with the probe;

(d) detecting an amount of the probe at each different and separate predetermined position of the substrate by detecting the first detectable label;

(e) detecting an amount of the sample biopolymer [bound] hybridized to the probe at each different and separate predetermined position of the substrate by detecting the second detectable label; and

(f) producing a value representing the degree of hybridization between [a] the probe at each different and separate predetermined position and [a] the sample biopolymer by [normalizing] dividing the difference between the amount of the probe detected at each different and separate predetermined position and the amount of the sample biopolymer hybridized to the probe [with] by the amount of the probe.

24. A method for detecting [the] a degree of hybridization between an oligonucleotide probe immobilized onto an array and a sample nucleic acid, the method comprising

(a) providing a substrate on which each of a plurality of types of oligonucleotide probes is separately immobilized on each different and separate predetermined position to form an array, wherein the oligonucleotide probes are labeled with a first detectable label;

(b) providing a sample comprising a nucleic acid, wherein the nucleic acid is labeled with a second detectable label;

(c) contacting the sample with the probe;

(d) detecting an amount of the probe at each different and separate predetermined position of the substrate by detecting the first detectable label;

(e) detecting an amount of the sample nucleic acid hybridized to the probe at each different and separate predetermined position of the substrate by detecting the second detectable label; and

(f) producing a value representing the degree of hybridization between [a] the probe at each different and separate predetermined position and a sample by

[normalizing] dividing the difference between the amount of the probe detected at each
different and separate predetermined position and the amount of the sample nucleic acid
hybridized to the probe [with] by the amount of the probe.